

## ABSTRACT

A switching power source is capable of conducting constant-current drooping control on a load, increasing an energy conversion efficiency on a secondary side, and improving heat radiation performance. The switching power source detects whether or not an overcurrent exceeding a reference value  $V_6$  is passed to a switching element  $Q_1$ , switches a first constant current  $I_3$  and a second constant current  $I_4$  smaller than the first constant current  $I_3$  from one to another according to a result of the overcurrent detection, directly superposes the first constant current  $I_3$  on a feedback voltage  $V_3$  at an input part, superposes the second constant current  $I_4$  on an output part where the feedback voltage is converted to have an impedance lower than that at the input part, and controls the ON-period of a pulse signal supplied to the switching element  $Q_1$  according to a resultant feedback voltage, thereby achieving constant-current drooping control on a load 29.